Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-23. (Canceled)

24. (Currently Amended) An anesthetic vaporizing system, comprising:

a bypass valve;

a carrier gas source for delivering a carrier gas stream to the bypass valve, wherein the bypass valve splits the carrier gas stream into a first carrier gas stream for delivery to an inlet port and a second carrier gas stream for delivery to a joining valve;

a vaporizing chamber for an anesthetic agent, comprising the inlet port, an outlet port, a vaporizing means and a conduit for delivery of vaporized anesthetic from the outlet port to the joining valve; ~~and~~

an array of sensors in flow communication with the joining valve to quantitate the anesthetic, the array of sensors being disposed downstream of the joining valve with respect to a flow direction of the anesthetic;

a fluid concentrator in flow communication with the sample chamber, the fluid concentrator having an absorbent material capable of absorbing the analyte and capable of desorbing a concentrated analyte; and

desorbing means wrapped around the fluid concentrator, for enhancing desorbing of the concentrated analyte.

25. (Previously Presented) The system of claim 24, further comprising a detector operatively associated with each sensor that provides a response in the presence of an anesthetic vapor.

26. (Canceled).

27. (Previously Presented) The system of claim 24, wherein said vaporizing means comprises one or more of a heater, pressure source or aspirator.

28. (Previously Presented) The system of claim 24, wherein said array of sensors comprises a member selected from the group consisting of a surface acoustic wave sensor, a quartz microbalance sensor; a conductive composite; a chemiresistor; a metal oxide gas

sensor and a conducting polymer sensor, a dye-impregnated polymer film on fiber optic detector, a polymer-coated micromirror, an electrochemical gas detector, a chemically sensitive field-effect transistor, a carbon black-polymer composite, a micro-electro-mechanical system device and a micro-opto-electro-mechanical system device.

29. (Previously Presented) The system of claim 24, wherein said array of sensors comprises one or more conducting-polymer composite sensors.

30. (Previously Presented) The system of claim 24, wherein said array of sensors is suitable for process control over the concentration of anesthetic gases.

31. (Previously Presented) The system of claim 24, wherein said anesthetic is injected directly into the carrier gas stream.

32. (Previously Presented) The system of claim 24, wherein said anesthetic is a volatile anesthetic.

33. (Previously Presented) The system of clam 32, wherein said anesthetic is selected from the group consisting of halothane, isoflurane, servoflurane, desflurane and enflurane.

34. (Previously Presented) A method for monitoring an anesthetic vapor, said method comprising:

a) contacting a sensor array with an anesthetic vapor using the vapor system of claim 24 to produce a response; and

b) detecting the response with a detector, to quantitate the anesthetic vapor.

35. (Previously Presented) The method in accordance with claim 34, wherein said sensor array comprises a member selected from the group consisting of a surface acoustic wave sensor, a quartz microbalance sensor; a conductive composite; a chemiresistor; a metal oxide gas sensor and a conducting polymer sensor, a dye-impregnated polymer film on fiber optic detector, a polymer-coated micromirror, an electrochemical gas detector, a chemically sensitive field-effect transistor, a carbon black-polymer composite, a micro-electro-mechanical system device and a micro-opto-electro-mechanical system device.

36. (Previously Presented) The method in accordance with claim 34, further comprising inputting said response to a neural net trained against said anesthetic vapor.

37. (Previously Presented) The method in accordance with claim 34, further comprising concentrating said anesthetic vapor prior to contacting said sensor array.

38. (Previously Presented) The method in accordance with claim 37, wherein said anesthetic vapor is concentrated in a breath collector concentrator.

39. (Previously Presented) The method in accordance with claim 38, wherein said breath collector concentrator is adapted to receive breath from the nose, nasal passages and mouth.

40. (Previously Presented) The method in accordance with claim 38, wherein said breath collector concentrator is adapted to provide breath from the nostril to avoid cross-contamination from the mouth.

41. (Previously Presented) The method in accordance with claim 34, wherein said anesthetic is a volatile anesthetic.

42. (Previously Presented) The method in accordance with claim 41, wherein said anesthetic is selected from the group consisting of halothane, isoflurane, servoflurane, desflurane and enflurane.

43. (Canceled).

44. (Previously Presented) The system of claim 26, wherein the desorbing means comprises a wire wrapped around the fluid concentrator plural times, and wherein the desorbing means removes unwanted gas contaminates and moisture from the fluid concentrator.